

FW air board request for public comment.txt
From: fht@mounet.com [mailto:fht@mounet.com]
Sent: Thursday, May 15, 2008 6:46 PM
To: vchec
Subject: air board request for public comment

I am Frank Taylor, a resident of Scott County Virginia, and I live beside the Clinch River a few miles downstream from Virginia City. I am responding to Vivian Thomson's memo to DEQ director David Paylor regarding "Questions for DEQ staff.....". In section 3, (Impacts on other media), article 13 vice-chair Thomson asks;

"Eventually the ash stored on site will have to be disposed of in some manner. where will it be disposed? what are the chemical characteristics of this ash and how will it be handled to avoid having toxic components like heavy metals become environmentally available?"

I have reviewed Dominion's Part A application for a waste permit at DEQ in Abingdon, Va. and can report that Dominion plans to dispose of the ash in a 188 acre landfill referred to as Curley Hollow which is beside the plant site. When completed the fill would extend 200 feet above the ridge tops. The entire 188 acre site sits on top of abandoned underground mines that date back to the turn of the century. The mines themselves are layered due to the layering of the coal seams; Jawbone, Raven, and Aily. The Virginia Division of Mines has maps which show the underground workings but stipulates a disclaimer on the maps to the effect that "there could be more mines that we do not know about. These were maps provided to us, there are maps we don't have, there were maps that were lost, and there was mining in that area when no maps were kept".

DEQ staff has reported to me that their "biggest nightmare is a landfill failure". Dominion's application addresses the concern of underground mine subsidence which could cause a breach in the plastic liner of the landfill thus causing landfill failure. Their plan is to utilize a computer model that would show those areas of the mines where subsidence might occur and inject grouting material into that spot. The model was constructed by Dr. Michael Karmis of Virginia Tech who also supplies information about carbon capture and sequestration and other coal related issues. In their application there is a reference to a power plant in "northern Appalachia" where this technology was employed and it turns out to be Alleghany Power's facility in Harrison, West Virginia. The Harrison Station plant was forced to expand their landfill to an area above underground mines when they complied with EPA rulings which increased their waste output. Up until that time the State of West Virginia prohibited any landfill to be located above an underground mine. However, the company came up with a plan and the state permitted it. GAI consultants of Pittsburgh provided that plan as they did for Dominion at Virginia City and one other project they can't talk about.

After reviewing Dominion's application it is my clear conclusion that the landfill should be placed somewhere else. In no case should it be above underground mines. And the reasons are:

1. The computer model would, I think, depend on very accurate maps of the underground mines. Those apparently do not exist. It would also depend on a very accurate assessment of the stability of the strata between the surface and the mine ceilings. That seems unlikely due to the fracturing that must have occurred from the explosive blasting that took place when the area was surface mined.
2. The very idea of a computer model to predict subsidence over such a large area for let's say at least the next 50 years is practically ridiculous. It does not seem farfetched to compare it to placing a concrete block on a slab of swiss cheese. How could you ever determine that injecting grout into a spot in a mine would prevent subsidence?
3. Landfill failure caused by a liner breach due to subsidence would release a toxic flow directly into the labyrinth of underground mines bypassing wells that would detect a leak into the aquifer. Even if detected, what could

be done short of digging up the entire landfill.
Hopefully it would not have reached the ridge tops. That is the nightmare.

4. At least one of the chemical characteristics of this ash that Ms. Thomson asks about is a much higher level of mercury due to the burning of waste coal.

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5. The Clinch River flows but a short distance from this proposed landfill. A toxic breach into the mines could flow directly to the river. It is a pristine river and local folks eat a lot of fish from that river. I know, I have lived beside it for 38 years.

6. The plant in west Virginia seems to be the likely choice for comparison but that landfill is in it's infancy. The risk of subsidence would expand as the weight of the landfill increased.

7. The obvious choice is to simply put the landfill somewhere else and avoid this enormous risk.

In their application Dominion states that they did not consider an alternative site that was more than 2 miles from the site of the proposed site. The other sites received only a cursory mention and at least one was dismissed because of underground mines. They must find a safe site for their waste no matter what the distance or cost. I think they chose Curley Hollow because it was cheap and they didn't think anybody would complain. This attitude is consistent with this entire project from the beginning. Does the EPA not concede that air dispersion modeling is difficult and often inaccurate in complex terrain? Is it not the case that during periods of low wind or no wind that the smokestack emissions would combine with the fog that covers these mountain communities many days of the year and that fog would spill into those communities like pouring soup into a bowl? For a population that is 3 times sicker than people in the rest of the state (UVA wise medical study) is that not unacceptable? The bill from the Legislature that said this would be a good idea has proven to be naive and irresponsible. I sincerely and respectfully hope that the Air Board will consider this letter.

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